REMARKS

Claims 1-29 are pending in the application.

Claims 1-29 have been rejected.

Reconsideration of the Claims is respectfully requested.

1. Rejection under Section 103

Claims 1-29 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,042,891, to Oberman et al. ("Oberman") in view of U.S. Patent No. 5,274,768 to Traw et al. ("Traw").

Oberman was cited as "disclos[ing] dynamic selection of lowest latency path in a network switch (see Oberman col. 2 lines 29-58) . . . ." (Office Action at pp. 2-3). But, for example, the cluster link memory of Oberman, does not recite updating an input virtual channel linked list corresponding to the input virtual channel to include the data block.

Oberman recites to "reduce latency when the switch is not congested, the switching logic may be configured to perform a cut-though operation by routing packets directly from input ports to output ports *without storing any portion of the packet in memory*." (Oberman 3:10-16, Abstract).

In a congested mode, Oberman recites that "as soon as the switch becomes even slightly congested, then port interface 704A and switch fabric 140 will switch to store-and-forward routing instead of cut-through routing." (Oberman 17:11-14).

With respect to memory, Oberman recites that "[c]luster link memory 404 may be configured as a linked list memory to store incoming packets. Packet free queue 406 is configured to operate as a 'free list' to specify which memory locations are available for storing newly received packets. In some embodiments, input block 400 may be configured to allocate storage within shared memory 440 using clusters." (Oberman 7:31-35).

Clusters, as recited by Oberman, are "used to reduce the number of bits required for tracking and managing packets. Advantageously, by dividing packets into clusters instead of cells, the overhead for each packet may potentially be reduced. For example, in one embodiment shared memory 440 may allocate memory in 128-byte clusters." (Oberman 7:42-46).

Applicant respectfully submits that Oberman does not recite updating an input virtual channel linked list corresponding to the input virtual channel to include the data block. Also, Oberman does not recite storing the data block in a receiver buffer of the host device, wherein storing the data block in the receiver buffer includes storing the data block in the receiver buffer at an old free linked list head address. Oberman does not recite transfer of data blocks from an input virtual channel linked list, which includes reading the data block from the receiver buffer at an old input virtual channel linked list head address. Further, Oberman does not a receiver buffer operable to instantiate an input virtual channel linked list for storing data blocks on an input virtual channel basis and to instantiate a free list that identifies free data locations."

Instead, Oberman recites the use of linked list of pointers to facilitate the manageability of a data packet during times when an output port does not have enough resources to cut-through by directly forwarding the bytes received at the input port to the output port. (*see* Oberman 3:10-13, Abstract).

The Office Action notes that Oberman "does not explicitly teach updating an input virtual channel linked list corresponding to the input virtual channel to include the data block . . . ." (Office Action at p. 3).

The Office Action cites Traw as "in the same or similar field of endeavor teaches updating an input virtual channel linked list corresponding to the input virtual channel to include the data block; storing the data block in the receiver buffer includes storing the data block in the receiver buffer at an old free linked list head address (columns 5-6, lines 65-11 . . . .)." (Office Action at pp. 4; *see also* Office Action at pp. 5, 6, 10, 15, 19, 23, 29, 33).

Applicant respectfully submits that Traw does not recite data routing within a host device, but instead provides a SONET interface to receive ATM cell data for a predestined device (such as "an IBM RS/6000 Workstation 4"). (*see* Traw Fig. 1).

Figure 2 of Traw is recited as "a block diagram of the Reassembler 3 of the computer network . . . :"

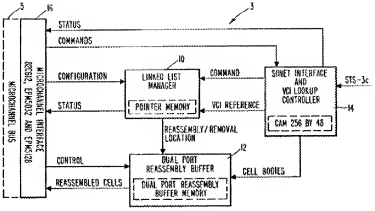

Fig. 2

(Traw 4:58-59). The Reassembler 3, of the host interface 1, is recited as including a "Block 14 [that receives ATM cells from an ATM switch 7 and] splits the [ATM] cells' headers from the . . . cell bodies and passes the [Virtual Channel Identifiers (VCIs)] to the Linked List Manager 10 and the cell bodies to the Dual Port Reassembly Buffer 12. The Linked List Manager 10 creates a linked list for each VCI that identifies the locations in the Dual Port Reassembly Buffer 12 of all cell bodies associated with that VCI." (Traw 5:54-61).

The linked list manager 10 "effect[s] reassembly [of the ATM cells]:

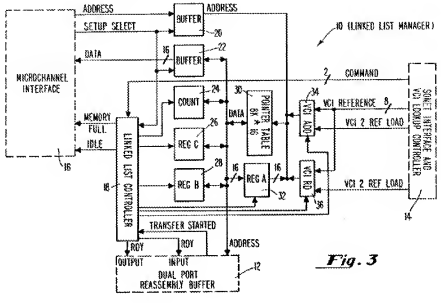

Fig. 3

(Traw 5:65). The interface device of Traw does not recite data routing as set out in Applicant's claims – Traw recites a SONET interface that receives an ATM packet, which splits the ATM cells' headers from the cell bodies and passes the Virtual Channel Identifiers (VCIs) to the Linked List Manager 10 for delivery to the IBM RS/6000 Workstation 4, and not to a destination within a host device.

In the hypothetical combination the Office Action submits that "[k]nown work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art." (Office Action at pp. 5, 10, 18, 22, 27, 31, 35).

For a rejection based upon a "field of endeavor" rationale, "Office personnel must resolve the *Graham* factual inquiries. Then, Office personnel must articulate the following: (1) a finding that the scope and content of the prior art, whether in the same field of endeavor as that of the applicant's invention or a different field of endeavor, included a similar or analogous device (method, or product); (2) a finding that there were

design incentives or market forces which would have prompted adaptation of the known device (method, or product); (3) a finding that the differences between the claimed invention and the prior art were encompassed in known variations or in a principle known in the prior art; (4) a finding that one of ordinary skill in the art, in view of the identified design incentives or other market forces, could have implemented the claimed variation of the prior art, and the claimed variation would have been predictable to one of ordinary skill in the art; and (5) whatever additional findings based on the *Graham* factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness. The rationale to support a conclusion that the claimed invention would have been obvious is that design incentives or other market forces could have prompted one of ordinary skill in the art to vary the prior art in a predictable manner to result in the claimed invention. If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art." MPEP 2143 at page 2100-136 (Rev. 6, Sept. 2007).

Applicant respectfully submits that such findings have not been presented, and respectfully requests such findings be presented.

Further, Applicant respectfully submits that the hypothetical combination of the cluster memory device of Oberman with the dissimilar ATM cell interface device of Traw is not based on predictable design incentives or other market forces/market place incentives that would achieve the invention as set out in Applicant's claims.

For example, Traw recites that a "goal of the present invention is to provide an interface between a network element and a telecommunications network that operates at near Gbps speeds and that is compatible for use with the ATM transmission technique. . . . A yet further goal . . . is to provide a high-performance interface for an IBM/6000 workstation host in an ATM telecommunications network." (Traw 3:48-62). Applicant respectfully submits that the VCI link list serves to group related cell bodies to the IBM/6000 workstation host. (*see* Traw 6:56-64).

In contrast to the hypothetical combination of Oberman with Traw, Applicant's Independent Claim 1 recites, *inter alia*, a "method for routing data *within a host device* comprising: receiving a data block at a receiver of the host device . . . *storing the data block in a receiver buffer* of the host device, wherein storing the data block in the receiver buffer *includes storing the data block in the receiver buffer at an old free linked list head address*; . . . *updating an input virtual channel linked list corresponding to the input virtual channel to include the data block*; determining an output virtual channel for the data block; *transferring the data block from the input virtual channel linked list of the receiver buffer to a destination within the host device via the output virtual channel, wherein transferring the data block from the input virtual channel linked list of the receiver buffer to a destination within the host device via the output virtual channel includes reading the data block from the receiver buffer at an old input virtual channel linked list head address*; and *updating the input virtual channel linked list to remove the data block*." (emphasis added).

Also, Applicant's Independent Claim 11 recites, *inter alia*, a "method for routing data *within a host device* comprising: . . . *storing the data block in a receiver buffer* of the host device, wherein storing the data block in the receiver buffer *includes storing the data block in the receiver buffer at an old free linked list head address*; when the input virtual channel has identified therewith an output virtual channel *updating an output virtual channel linked list corresponding to the output virtual channel to include the data block*; and when the input virtual channel *has not identified therewith an output virtual channel*: updating an input virtual channel linked list corresponding to the input virtual channel to include the data block; *processing the data block to determine an output virtual channel* for the data block; updating an output virtual channel linked list corresponding to the output virtual channel to include the data block; and updating the input virtual channel linked list to remove the data block." (emphasis added).

Further, Applicant's Claim 20 recites, *inter alia*, a "received *data processing and storage system* comprising: . . . a routing module that determines an output virtual channel for data blocks based upon their respective input virtual channels; a receiver

buffer operable to instantiate an input virtual channel linked list for storing data blocks *on an input virtual channel basis* and to instantiate *a free list that identifies free data locations*; a linked list control module operably coupled to the receiver buffer; input virtual channel linked list registers operably coupled to the linked list control module; and *free linked list registers* operably coupled to the linked list control module." (emphasis added).

In view of the above, Applicant respectfully submits that a *prima facie* showing has not been made.

There is not suggestion or motivation for the hypothetical combination of the cluster memory device of Oberman with the dissimilar ATM cell interface device of Traw. Further, the necessary findings to provide a "field of endeavor" determination between the dissimilar references has not been presented.

Also, the cited references of the cluster memory device of Oberman and the ATM cell interface device of Traw do not teach or suggest all of Applicant's claim limitations. For example, these cited references do not refer to transferring data blocks from an input virtual channel linked list of a receiver buffer to a destination within the host device via an output virtual channel.

2. Conclusion

As a result of the foregoing, the Applicant respectfully submits that claims 1-29 in the Application are in condition for allowance, and respectfully requests allowance of such Claims.

If any issues arise, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at ksmith@texaspatents.com.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Garlick Harrison & Markison Deposit Account No. 50-2126.

Respectfully submitted,

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